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#### Coleman et al.

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# (54) METHODS FOR MAKING IMPROVED TEXTURE CEREAL BARS

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#### (56) References Cited

#### U.S. PATENT DOCUMENTS

3,821,443	A	6/1974	Halladay et al.
3,882,253	A	5/1975	Schafer et al.
3,903,308	A	9/1975	Ode
4,017,644	A	4/1977	Jokay
4,018,900	A	4/1977	Hayward et al.
4,018,901	A	4/1977	Hayward et al.
4,038,423	A	7/1977	Hayward et al.
4,039,688		8/1977	Hayward et al.
4,049,832	A	9/1977	Hayward et al.

4,055,669 A	10/1977	Kelly et al.	
4,145,448 A	3/1979	Hayward et al.	
4,152,462 A	5/1979	Hayward et al.	
4,152,463 A	5/1979	Hayward et al.	
D257,093 S	9/1980	Brittner	
4,310,560 A	1/1982	Doster et al.	
4,451,488 A	5/1984	Cook et al.	
4,496,606 A	1/1985	Michnowski	
4,543,262 A	9/1985	Michnowski	
H70 H	6/1986	Berkowitz et al.	
4,605,561 A	8/1986	Lang	
5,045,328 A	9/1991	Lewis et al.	
5,137,745 A	8/1992	Zukerman et al.	
5,534,275 A	7/1996	Humbert et al.	
5,866,189 A	2/1999	Garwood et al.	
5,922,388 A	7/1999	Garwood et al.	
6,168,820 B1	1/2001	Garwood et al.	
6,299,929 B1	10/2001	Jones	
	(Continued)		

# FOREIGN PATENT DOCUMENTS

### EP 0293552 12/1988

(Continued)

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#### (57) ABSTRACT

A method of producing a cereal bar is provided in which the cereal comprises a cereal mixture including ready-to-eat (RTE) cereal pieces joined together with a binder, where the cereal and binder together form a cereal matrix which is heated for a time and temperature to reduce the water activity of the external portion thereof while maintaining an internal portion of the cereal matrix at a higher second water activity. The method provides cereal bars requiring less compressive force to be formed into a cohesive self-supporting structure in providing a chewy reduced-density cereal bar with improved shelf life.

#### 19 Claims, 3 Drawing Sheets

